REMARKS

Claims 1-44 are currently pending in the application. Claims 27 and 28 were allowed. Claims 1, 2, 4-8, 10, 12-14, 19-26, 29, 30, 33, and 35-42 were rejected. Claims 3, 9, 11, 15-18, 31, 32, 34, 43, and 44 were objected to. Claims 1, 4, 7, 12, 15, 16, 20, 21, and 24-27 have been amended. Claims 2, 3, 22, 23, and 29-44 have been canceled without prejudice. New claims 45-63 have been added.

The Examiner objected to claims 12, 20, and 21 for various informalities. Claims 12 and 21 have been amended and the objection is believed addressed thereby.

With regard to claim 20, the Applicants believe the claim to be in proper form as filed. That is, claim 20 recites that "the *at least one* inter-level interconnect structure" introduced in claim 19 "comprises *a plurality* of inter-level interconnect structures," i.e., as opposed to only one. Claim 20 further recites that each of the plurality of inter-level interconnect structures "provides a portion of the second connections between selected ones of the intra-level interconnect structures." Thus, it is intended that the term "inter" be employed on line 2 of the claim rather than "intra" as suggested by the Examiner. Notwithstanding the foregoing, claim 20 has been amended in a manner which the Applicants hope will clear up this issue for the Examiner. The undersigned respectfully requests that the Examiner call the undersigned if there is any further confusion regarding this issue.

The Examiner rejected claims 29 and 35-42 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Publication No. 2003/0214835 (Nejad). The Examiner also rejected claims 1, 2, 4-8, 10, 12-14, 19-26, 30, and 33 under 35 U.S.C. 103(a) as being unpatentable over Nejad. The Examiner indicated allowable or allowed subject matter in claims 3, 9, 11, 15-18, 27, 28, 31-32, 34, 43, and 44.

Amendments have been made to some of the claims and new claims have been added in response to the Examiner's indication of allowable subject matter. In addition, the Examiner's

rejections have been traversed with respect to some of the claims as indicated below. In view of these amendments and the following discussion, all of the claims currently pending in the application are believed to be in condition for allowance.

Claim 1 has been amended in response to the Examiner's indication of allowable subject matter in claim 3. New claim 45 has been added in response to the Examiner's indication of allowable subject matter in claim 9. New claim 53 has been added in response to the Examiner's indication of allowable subject matter in claim 15. It is therefore believed that these independent claims and any claims depending on these claims are in condition for allowance on at least these bases.

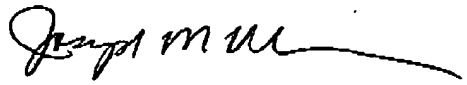
With regard to claim 24, the recited circuit includes "all-metal circuit components exhibiting magnetoresistance" which form "logic and processing circuitry." Similarly, claim 25 recites "all-metal circuit components exhibiting magnetoresistance" which form "linear analog circuitry." Finally, claim 26 recites "all-metal circuit components exhibiting magnetoresistance" which include "support electronics for controlling access to the memory cells, logic and processing circuitry, and linear analog circuitry."

By contrast, the only circuit components in Nejad which could possibly be mapped to the "all-metal circuit components" recited in claims 24-26 of the present application are MRAM memory cells 38. Indeed, the only other circuit components contemplated by Nejad, i.e., access transistors 16, are implemented using a conventional CMOS process in a semiconductor substrate (see paragraph [0016]). There is no teaching or suggestion in Nejad that any of the types of logic and analog circuits recited in claims 24-26 of the present application may be implemented as "all-metal circuit components exhibiting magnetoresistance." Therefore, the Applicants respectfully request that the rejection of these claims over Nejad be withdrawn.

In view of the foregoing, Applicants believe all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is

respectfully requested. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (510) 663-1100.

Respectfully submitted,
BEYER WEAVER & THOMAS, LLP



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